UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,958	02/11/2002	MacGregor Belniak	005378.P001	6988

7590 10/14/2005	**EXAMINER**
Michael J. Mallie	HIRL, JOSEPH P

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

ART UNIT	PAPER NUMBER
2129	

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/074,958	BELNIAK ET AL.
	Examiner	Art Unit
	Joseph P. Hirl	2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>27 July 2005</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-10</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-10</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>11 February 2002</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some *   c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   This Office Action is in response to an AMENDMENT entered July 27, 2005

for the patent application 10/074,958 filed on February 11, 2002.

2.   The First Office Action of April 8, 2005 is fully incorporated into this Final Office

Action by reference.

Status of Claims

3.   Claims 1-10 are pending.

Oath/Declaration

4.   It does not identify the mailing address of each inventor. A mailing address is an

address at which an inventor customarily receives his or her mail and may be either a

home or business address. The mailing address should include the ZIP Code

designation. The mailing address may be provided in an application data sheet or a

supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

       This objection must be corrected.

New Matter

5.   Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in

the relevant art that the inventor(s), at the time the application was filed, had possession

of the claimed invention. While the specification @ para 0065 addresses "An evaluation

algorithm provides a score for a Bayes Net", the concept of "a scoring evaluator to

compare two Bayesian networks and to assign a higher score to a one of the two

networks that has a shorter evaluation time" was not found and Applicant provided no

specific reference in the specification to the claim limitation.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

7.   Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by

Underwood (U.S. Patent 6,601,233, referred to as **Underwood**).

Claim 1

Underwood anticipates a memory to store a series of historical records and

results, where each record contains a set of data values for a corresponding set of

variables (**Underwood**, c 312, I 66-67; c 313, I 1-9; c314, I 19-29); a transaction input

unit to convey corresponding data values of a transaction for which a decision is to be

made (**Underwood**, c 22, I 24-42; c 22, I 60-67; c 23, I 1-8); a decision output unit to

convey a recommended decision (**Underwood**, c 2, I 5-21); a self-configuring modeler

to configure itself based upon information stored in memory in order to predict expected

results from any set of data values (**Underwood**, c 11, I 44-67; c 12, I 1-3; c 13, I 7-14;

Examiner's Note (EN): para 14 below applies; self-configuring modeler is embodied in

the object oriented programming concept where the model accepts the data made

available to it and appropriately self adjusts (calculates) an output); and a controller

coupled to the modeler and the transaction input unit to generate a decision output

(**Underwood**, Fig. 17A; c 3, I 45-52; c 53, I 39-51; EN: para 14 below applies;

Underwood exhaustively teaches business components framework which makes full

use of object oriented programming (OOP – c 11, I 35-67; c12-15; c 16, I 1-16) wherein

the full range of data, memory, transaction, decision, flexibility and controlling are

applied and the applicable models self-configure to such input data to generate an

output; Underwood further teach how such a system is managed).

Claims 2, 8

Underwood anticipates an output unit to convey a probability or expected value

of an expected result given the decision (**Underwood**, para 14 below applies; Fig. 17A;

c 3, l 45-52; c 53, l 39-51; c 2, l 5-21; EN: the coded module deployed to the e-commerce environment will provide an output which is an expected value).

Claims 3, 9

Underwood anticipates an output unit to convey a model produced by the modeler (**Underwood**, c 11, l 44-67; c 12, l 1-3; c 13, l 7-14; EN: para 14 below applies; self-configuring modeler is embodied in the object oriented programming concept where the model accepts the data made available to it and appropriately self adjusts (calculates) an output; such output conveys the model produced by OOP).

Claims 4, 10

Underwood anticipates a previously configured modeler (**Underwood**, c 11, l 44-67; c 12, l 1-3; c 13, l 7-14; EN: para 14 below applies; the previous configured modeler was established with the prior set of input data; the model adjust with input as it was designed to do).

Claim 5

Underwood anticipates the model is continuously updated with each transaction (**Underwood**, c 2, l 5-51; c 11, l 44-67; c 12, l 1-3; c13, l 7-14; EN: para 14 below applies; such would be the next set of input data that would update the model with new input values).

Claim 6

Underwood anticipates a scoring evaluator to compare two Bayesian networks and to assign a higher score to a one of the two networks that has a shorter evaluation time. (**Underwood**, c 226, l 62-67; c 227, l 1-5; EN: para 14 below applies; Bayesian

networks are equivalent to modeling a situation in which causality plays a role but where

the understanding of what is going on is incomplete and therefore must be estimated in

probabilistic terms; MTBF is a probabilistic measure for a network and depending on the

characteristics of the individual network, a higher score will be appropriately developed;

since the network with a higher MTBF will have less down time, it follows that the

network with the higher MTBF or shorter evaluation time ... less down time ... will be

assigned a higher score).

Claim 7

Underwood anticipates determining statistical probabilities of each combination

of data values (**Underwood**, c 91, I 1-7); applying the statistical probabilities to

determine an optimal predictive model (**Underwood**, c 91, I 10-15); applying a

transaction consisting of a new set of data values to the predictive model in order to

yield an expected set of probabilities for a result of each possible decision (**Underwood**,

c 91, I 1-7); presenting the representation to a control mechanism capable of enacting

decisions based on the knowledge represented (**Underwood**, Fig. 17A; c 3, I 45-52; c

53, I 39-51; EN: para 14 below applies; Underwood exhaustively teaches business

components framework which makes full use of object oriented programming (OOP – c

11, I 35-67; c12-15; c 16, I 1-16) wherein the full range of data, memory, transaction,

decision, flexibility and controlling are applied and the applicable models self-configure

to such input data to generate an output); and generating a decision output

(**Underwood**, c 2, I 5-51; EN: such is the result of the deployment of modules to the e-

commerce environment).

Response to Arguments

8.   The objection to the specification is withdrawn.

9.   The rejection of claim 6 under 35 U.S.C. 112, second paragraph, is withdrawn.

10.   Applicant's arguments filed on July 27, 2005 related to Claims 1-10 have been

fully considered but are not persuasive.

In reference to Applicant's argument:

Claim 1 recites a device for making automated transaction decisions, comprising a number of elements.
The first element, a memory, to store a series of historical records and results, where each record
contains a set of data values for a corresponding set of variables, is alleged to be taught or suggested by
Underwood at col. 312,11. 66-67, col. 313,11. 1-9, and col. 314,11.19-29. Applicants have carefully
reviewed the cited portions, but were unable to locate the claimed memory. Instead, the first portion (col.
312,1. 66 through col. 314,1. 9) presents an analogy to explain how the designer of a PC workstation
might think. A memory is mentioned, but the contents of the memory are not discussed. The second cited
section, col. 314,11. 19-2.9, appears to be unrelated to the first section, and also fails to teach or suggest
at least a series of historical records and results, where each record contains a set of data values for a
corresponding set of variables.

Examiner's response:

Para 14 applies. The prior art of Underwood extensively covers the subject of

Business Components Framework wherein methodology associated with generating

software based on business components to which a computer system such as that

described in Fig.1A is a fundamental part. Claim 1, first comprising, is appropriately

referenced in the First Office Action. Simply, Underwood teaches storage and memory

... which stores data which is always relate to something which can be defined as

variables. Certainly, customers, products, orders, inventory, pricing, credit check,

billing, and fraud analysis involve variables and storage of data. Since one has the

means for storage and the intent for it to be used, the first comprising of claim 1 is

anticipated. Applicant is invited to return to the First Office Action and to review paras

8.-11. on pages 6 and 7 of the First Office Action to understand the Examiner's

approach to the evaluation of the Applicant's claims.

In reference to Applicant's argument:

The second element of claim 1, a transaction input unit to convey corresponding data values of a
transaction for which a decision is to be made, is said to be found at col. 22,11. 24-42, and col. 22,1. 60
through col. 23,1. 8. Again, Applicants have been unable to determine how the cited material, which
"details the ReTA [Resources eCommerce Technology Architecture] approach to performing 'logical unit
of work' database operations," is like the claimed transaction input unit. Instead, the indicated portion of
the reference seems to describe how a software developer would design business components.

Examiner's response:

        Para 14 applies. Underwood teaches transactions.

In reference to Applicant's argument:

Similar problems affect the Examiner's analysis of the remaining elements of claim 1. For example,
instead of the claimed decision output unit to convey a recommended decision, the Examiner has cited a
portion of Underwood's Summary that mentions neither decision nor output.

Examiner's response:

        Para 14 applies. As indicated above, business components involve customers,

products, orders, inventory, pricing, credit check, billing and fraud analysis. It is

axiomatic that generating software based on business components as identified will

teach claimed decision output that conveys a recommended decision. First Office

Action applies.

In reference to Applicant's argument:

In the Examiner's Note following the discussion of claim 1, Underwood's exhaustive teaching of business components framework and, inexplicably, its full use of object oriented programming (OOP) are mentioned. Nevertheless, Applicants respectfully submit that an anticipation rejection cannot be supported by general and disparate citations to a reference on the apparent theory, that the claimed material must be in there somewhere, given an assumption of the comprehensive nature of the reference. Instead, the Patent Office has the initial burden to establish anticipation by showing that a single prior art reference discloses every element of the claim (In re King, 801 F.2d 1324, D.C. Cir.1986), including designating as nearly as possible the parts of the reference relied upon and explaining the reference's pertinence if it is not apparent (37 C.F.R.1.104(c)(2)). This is particularly important where, as here, the reference is 328 columns long.

Examiner's response:

Para 14 applies. Applicant is invited to return to the First Office Action and to review paras 8.-11. on pages 6 and 7 of the First Office Action to understand the Examiner's approach to the evaluation of the Applicant's claims. Simply stated, appropriate references to the claimed subject matter have been made with further explanation as to how and why the Examiner made such references to help the Applicant understand the prior art.

In reference to Applicant's argument:

Claim 7 recites a method for analyzing and representing data in a computer system comprising a number of operations. The Examiner addresses each operation in turn, but as with the analysis of the elements of claim 1., the cited portions of Underwood have absolutely no apparent relationship to the claimed operation. For example, the first element of claim 7 requires determining statistical probabilities of each combination of data values. This is said to be anticipated by the following portion of Underwood:

> Problem Management
>   Problem Management tools help track each system
> investigation request - from detection and portion [sic] of the
> present description to resolution (for example, Problem Tracking,
> Impact Analysis, Statistical Analysis). Several problem
> management software packages are available from a variety of
> vendors.

.Applicants are unable to determine the relationship between the availability of software packages to perform problem management and the specific operation of determining statistical probabilities of each combination of data values. Even assuming, solely for the sake of argument, that one of those commercially-available packages could be used to perform the claimed operation, the reference fails to teach or suggest that the software should be used in that way.

Similarly, each of the other elements are said to be anticipated by a portion of Underwood that bears no apparent relationship to the element. Indeed, the final element, generating a decision output, is said to be taught or suggested by Underwood at col. 2,11. 5-51, a section that includes the summary of the invention and the brief descriptions of the first three figures (and half of the description of the fourth figure).

Examiner's response:

Para 14 applies. Above discussion related to claim 1 apply. It is axiomatic that

tools are used for the purpose they were designed for. Underwood teaches tools that

help track each system investigation request – from detection and portion of the present

description to resolution (for example, Problem Tracking, Impact Analysis, Statistical

Analysis). Impact Analysis involves prediction and statistical analysis involves

probabilities. Business systems simply generate decision outputs as described in

Underwood's Summary of the Invention to include the cited figures. The Applicant is

reminded that the Examiner has full latitude to interpret each claim in the broadest

reasonable sense. First Office Action applies.

In reference to Applicant's argument:

...Applicants believe that the Examiner has failed to establish a prima facie case of anticipation.

Examiner's response:

From CFR 37 1.56(b)(2)(ii):

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden of proof standard, giving each term in the claim it broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

In the First Office Action dated April 8, 2005, each of the claims and each of the

items in the claims was referenced to appropriate sections of related art given in U.S.

Patent 6,601,233 as further discussed above.

Examination Considerations

11.   The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light

of the supporting disclosure. *In re Morris,* 127 F.3d 1048, 1054-55, 44USPQ2d 1023,

1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in

the claim are not read into the claim. *In re Prater,* 415 F.2d, 1393, 1404-05, 162 USPQ

541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The

Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Examiner will reference prior art using terminology familiar to one of ordinary skill in the

art. Such an approach is broad in concept and can be either explicit or implicit in

meaning.

12.   Examiner's Notes are provided with the cited references to prior art to assist the

applicant to better understand the nature of the prior art, application of such prior art

and, as appropriate, to further indicate other prior art that maybe applied in other office

actions. Such comments are entirely consistent with the intent and spirit of compact

prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior

art but a link to prior art that one of ordinary skill in the art would find inherently

appropriate.

13.   Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

14.   Examiner's Opinion: paras 11-13 apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

15.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

15.   Claims 1-10 are rejected.

Correspondence Information

16.   Any inquiry concerning this information or related to the subject disclosure

should be directed to the Examiner, Joseph P. Hirl, whose telephone number is

(571) 272-3685. The Examiner can be reached on Monday – Thursday from

6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the

Examiner's supervisor, David R. Vincent can be reached at (571) 272-3080.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

Hand delivered to:

Receptionist,

Customer Service Window,

Randolph Building,

401 Dulany Street,

Alexandria, Virginia 22313,

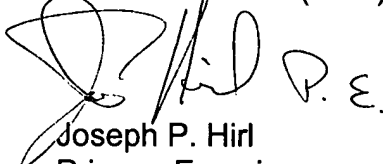(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 273-8300 (for formal communications intended for entry.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have any questions on access to Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll free).

Joseph P. Hirl
Primary Examiner
October 12, 2005